Is College Still Affordable? Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Due at the start of class on Wed, Feb 29th. It is worth 4 points. You may work with 1 partner. Do all work on paper. It is .5 off if turned in late. Papers turned in past Friday will not be accepted.

It is that time of year again, students applying and hopefully getting accepted to college. Whether you or one of your siblings is going off to college next fall it is useful to know how much, on average, college costs.  The chart below gives the average cost of room and board at U.S colleges and universities, as well as the average tuition over a recent 30 year period.  Not going to college this fall?  No worries, we can use the information below to predict the cost of college in the future.  After completing this activity you will have a better idea of how much four years of college could cost you!

1. Find the cost for room & board + tuition at Iowa State or University of Iowa for this year (2011-2012). (Cite your source.) AVERAGE THE COST OF IN-STATE AND OUT-OF-STATE

Use the following chart to answer the questions below. Make sure you following these directions: Your x-axis should represent years since 1978. This means that 1978 will be zero and 1983 will be 5 and so on. Before you begin, turn your diagnostic on. You will need to go to catalog, diagnosticon

|  |  |  |
| --- | --- | --- |
| Year | Room & Board | Tuition |
| 1978 | 1521 | 1397 |
| 1983 | 2404 | 2344 |
| 1988 | 2253 | 3472 |
| 1993 | 4168 | 5119 |
| 1998 | 5166 | 6723 |
| 2003 | 6476 | 9029 |
| 2008 | 8361 | 12075 |

2. Write a linear equation that can be used to model the cost of room and board based off years since 1978. Explain what each part of the equation represents. Also write down the correlation coefficient, r, and tell us what it means in this context.

2b. Then use your equation to estimate the cost of room and board in the year 2012.

3. Write an exponential equation that can be used to model the cost of tuition based off years since 1978. Explain what each part of the equation represents. Also write down the correlation coefficient, r, and tell us what it means in this context.

3b.Then use your equation to estimate the cost of **TUITION** in the year 2012.

4. Explain why your answers for 2b, 3b match (or do not match) the answer you find for question 1. Give at least two reasons.

5. Use your equations to predict the cost of tuition and room and board during the four years that you would be attending college. Use the table below to display your answer:

|  |  |  |  |
| --- | --- | --- | --- |
| Year | Room & Board Cost | Tuition Cost | Total Cost |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

6. Add up all four years of total costs. About how much might four years of college cost you (remember, this is based off average college costs)